

*The Cathedral of St. John*  
*the Divine*

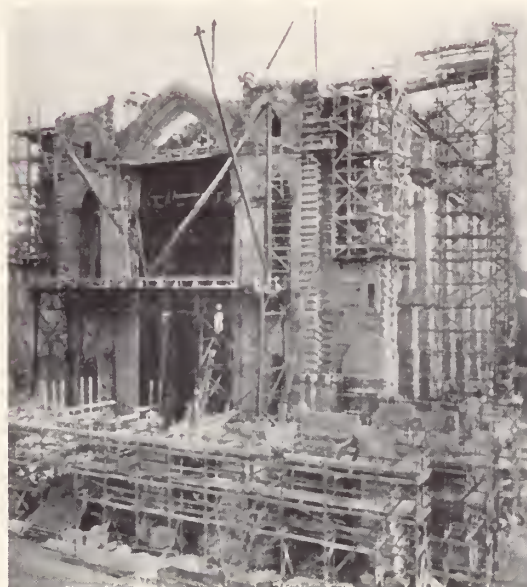
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*J. W. Benson*

# The Cathedral of St. John the Divine

*Its Progress Pictured*



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*January*  
*1928*



As the completed Cathedral will appear from the north. The length of the structure is 601 feet.



*"When the student, who has familiarized himself with the mediaeval cathedrals, first enters the nave of St. John's, looks through the two lines of soaring columns that sweep, unbroken, from floor to roof, and appreciates the vast stretch of 96 feet from clerestory window to clerestory window, he will realize that here is something which, for sheer majesty of effect, is unmatched among the cathedrals of the world."--- J. Bernard Walker, Editor Emeritus, Scientific American.*



## To the Builders of the Cathedral of St. John the Divine:

This book of drawings and photographs will help you to realize the magnitude of the work that we have in hand, and the point of progress that we have reached, in the erection of one of the world's greatest cathedrals. The architect's drawings show the majesty and beauty of the designs as at length developed and adopted. The photographs show the actual progress of construction, which now covers the entire ground plan of the vast edifice with the exception of the South Transept and the Chapter House.

By studying these views in the order in which they are given you can make a little tour of those parts of the Cathedral at present under construction. Starting on the north side of the building you will proceed to the West Front where you will enter through the great Central Portal. Passing along through the Nave, you will face about and look towards the Rose Window in the west and will pause to look at the Bays, each with its own Chapel. Then, entering the immense space of the Crossing, you will stand before the Choir which is to be remodeled to har-

monize with the glory of the Nave. From there you will go to the superb Baptistry, soon to be completed, and then on into the Women's Transept, the foundations of which are now being laid.

In a little more than three years we have seen work begin on the Baptistry, the Nave, the West Front and, within the past few weeks, on the Women's Transept. This progress is encouraging but it is well for us to realize that some of the greatest of the old cathedrals were completed in less time than ours has already taken. St. Paul's in London was built in thirty-five years, the Cathedral of Chartres in sixty-six years, Amiens in sixty-eight years, and Santa Sophia in less than six years. It is fifty-five years since our Cathedral project was inaugurated, and building operations commenced thirty-six years ago, in 1892. And encouraging as our progress has been recently, there is still much for us to do. The glorious Central Tower and the South Transept are still to come. The funds now given and pledged are sufficient only to complete the present contracts on the Nave and

to make a beginning in the erection of the West Front up to a point thirty-nine feet above the floor level, and the fund for the Women's Transept is still incomplete.

We are all hoping that the building of the Cathedral may now go forward without interruption. Let me quote one whose words upon any subject command the attention and respect of the people of our city and country, Mr. Elihu Root. Speaking in Carnegie Hall, at a meeting in aid of our present efforts, Mr. Root said:

Much has been done, yet the Cathedral of St. John the Divine is a long time in building. I have seen the plans for the complete structure. They are most inspiring. They fill the soul of an American with a glowing feeling to think that the genius of an American architect can visualize such a structure for the future of his country.

Many of us can never see the completion of the structure, but I, for one, would like, if I could, to say some word that may hasten on the laying of one stone in the wall.

The Cathedral is not like an ordinary church. This is a country of small churches, many of them very beautiful, but an ordinary church is an Episcopal Church or a Catholic Church or a Presbyterian Church, while a great Cathedral, with its vast spaces, its universal symbolism, its appeal to historic instinct, gives an unmistakable impression of the faith of a people, and holds out its arms to all the world. It is Chris-

tian, and it is a perpetual illustration of universal Christianity.

I do not think the building of this Cathedral is solely your matter; it is primarily yours, because you have undertaken it, and you are to be the trustees of that great influence upon the world; nevertheless, it is an influence for the nation, and upon the nation, for the world, and upon the world, and it is a matter for all of us, not limited to a single diocese, or to whatever race or creed. The building of the Cathedral of St. John the Divine is a matter that ought to be of solicitude and pride for us all.

Build that great and noble Cathedral.

Build it not solely for the Diocese of New York, but build it for all our brother men living in the world.

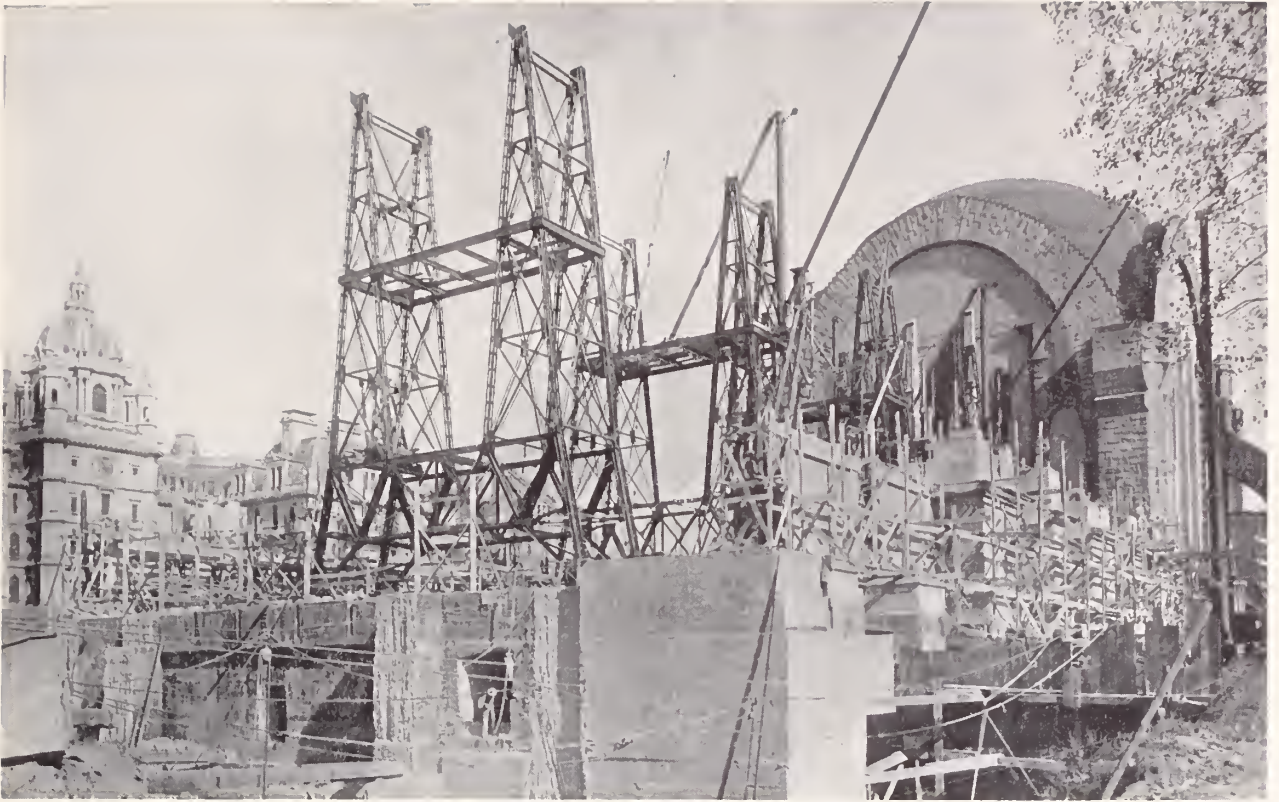
Build it as a testimony that the lessons that came to us from our God-fearing fathers have not been forgotten.

Build it as a contribution of America to the spiritual life of mankind. And thereby help to save our own souls.

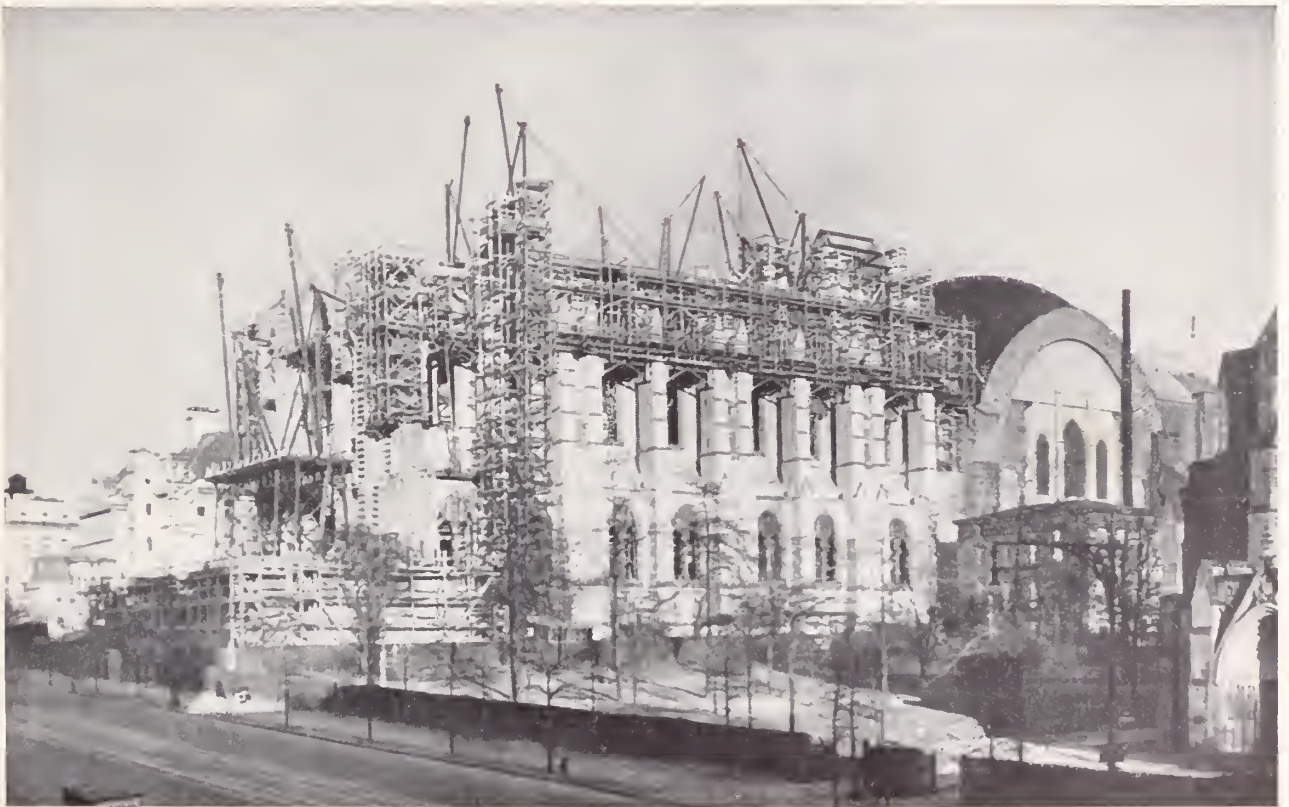
If we will keep that noble appeal in mind, and all do our part according to our means, the building of the Cathedral will not have to stop for lack of funds, but we shall carry it forward to completion to stand through the ages as a mighty witness to our faith in God, to the revelation of His love given to us in Jesus Christ, and to the place which belongs to Him in our life as a people.

William J. Manning.

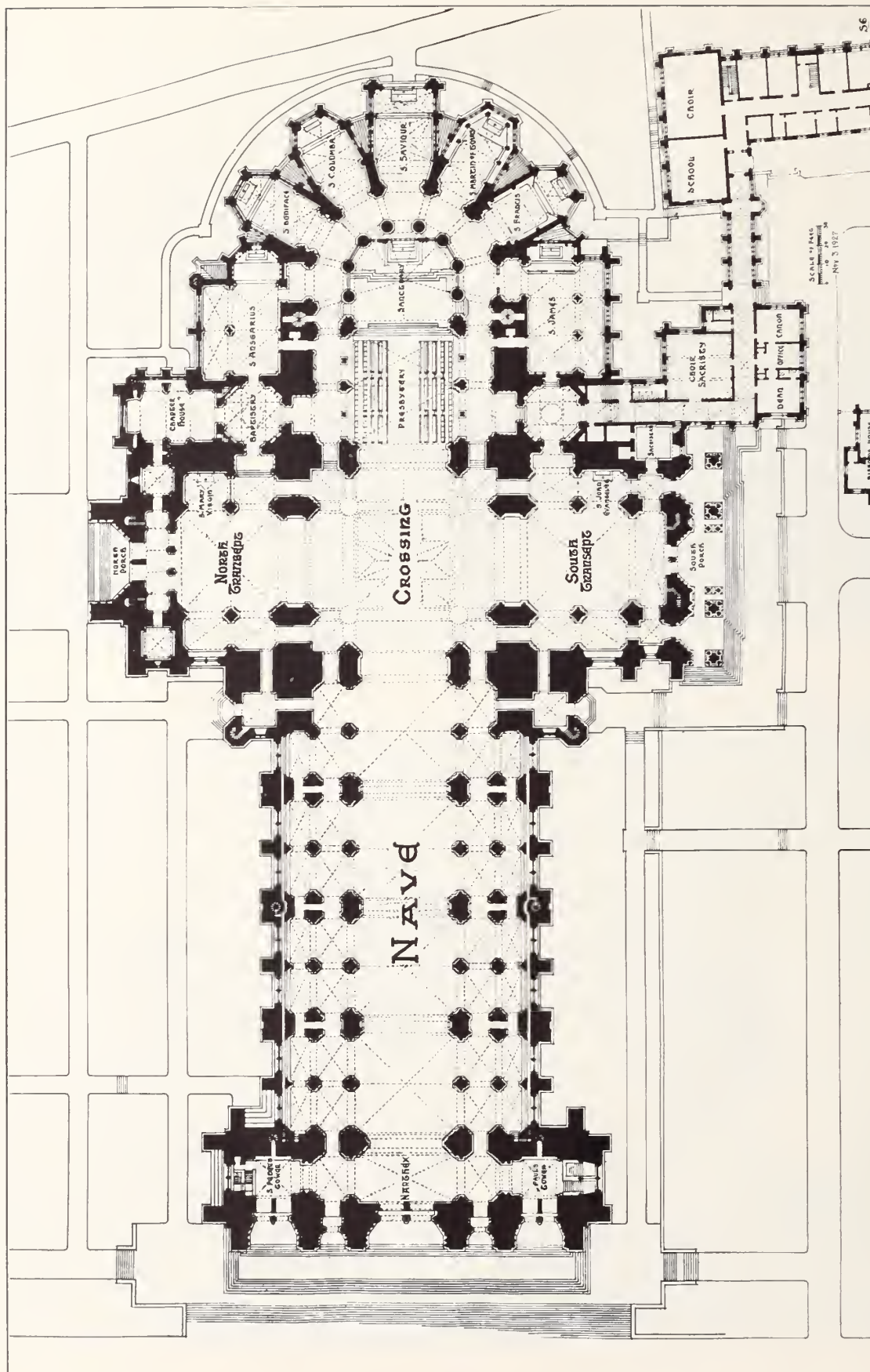




August, 1925. Steel scaffolding here used for the first time in any building.



December 9, 1927. A recent view of the construction.



Ground plan of the Cathedral of St. John the Divine.





Dissected longitudinal plan. The numerals indicate the seven southern bays in the Nave. Note that a portion of the space between the vaults and the roof is cut away to show on the north the component parts of a bay. See also pages 12 and 13.





Drawing of the West Front upon which construction has commenced.





The Central Portal.

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The West Front follows the best traditions of French Gothic. Its great width of 207 feet made possible the adoption of the five portal plan, the special glory of Bourges. The size of the side portals has been diversified, yielding a pleasing architectural rhythm.

The perfection and profusion of the sculptural ornament of their portals give the French cathedrals their preëminence. Statues of the Saints and figures of our Lord fill and crown the doorways, where the artistry and religious symbolism are most easily studied and are most impressive.

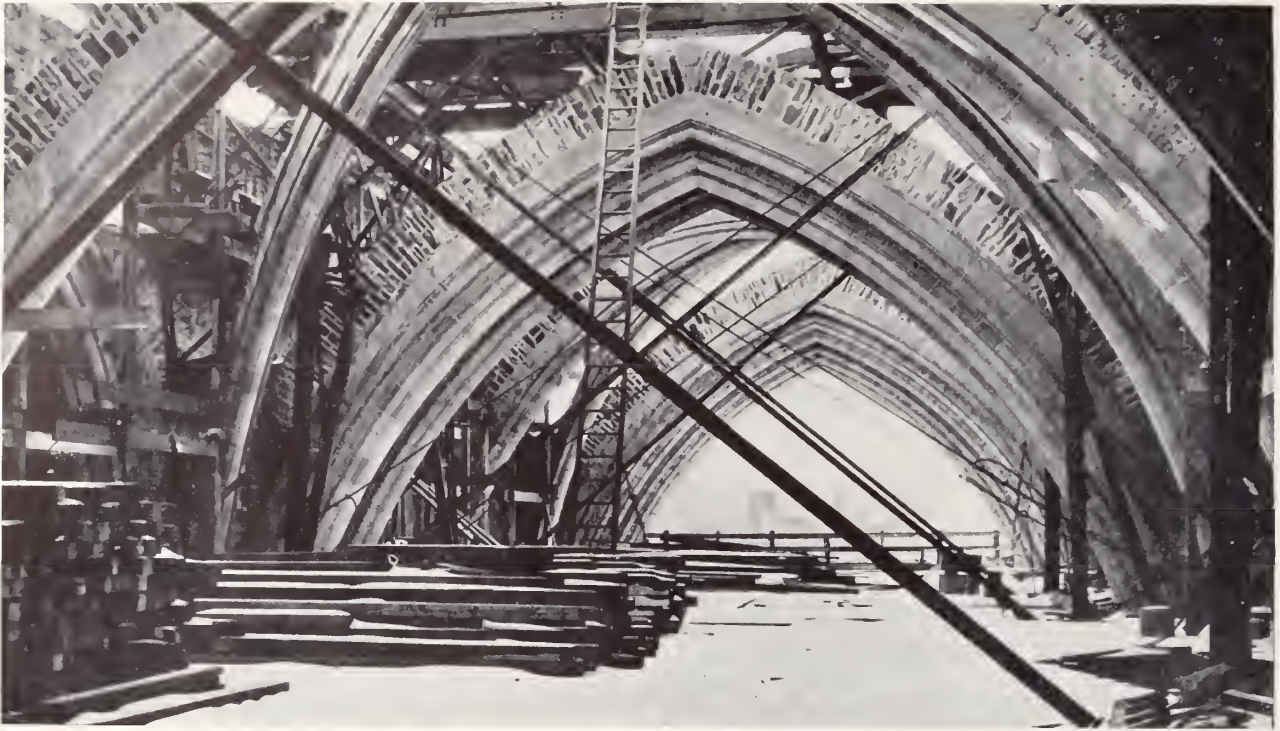
The modeling of the sculpture has been intrusted to the two most eminent and gifted artists in Gothic now to be found in America, Mr. Lee Laurie, who has the incomparable reredos of St. Thomas' Church to his credit, and Mr. John Angel, whose work in the Baptistery of the Cathedral and the façade of the Chapel of Princeton University gives assurance that the whole will display rare unity of religious expression and artistic perfection. Mr. Laurie will execute the figures of the main, or central, portal shown on this page.

The deep reveals will on the north side have statues more than life size of Moses, Joseph, Isaac, Abraham, Noah and Melchisedek, and on the south side John the Baptist, Daniel, Isaiah, Jeremiah, Simeon and David. Our Lord in majesty will be the subject in the tympanum and at the apex of the gable there will be a figure of St. John the Divine.

The north and south portals will commemorate the Saints and Martyrs of the historical Church, with special emphasis in the north portal upon the heroes of Anglican Christianity.

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Herald Tribune—Steffen

Looking west toward Broadway and the Hudson River. The transverse arches and diagonal groins of the vaulting, which may be seen also in the drawing of the completed Nave on the opposite page, are here shown.





The Nave, looking west. The piers have the same height as those of the Nave of Milan Cathedral, 100 feet.





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The principal feature of each of the fourteen bays in the Nave is a chapel 18 feet deep, 25 feet wide and 43 feet high. Above the chapel arch is the triforium gallery, and above that the clerestory windows rise more than 100 feet from the floor, as shown in this transverse view of the Nave. The drawing on the opposite page does not indicate the depth of the chapels. It is intended to suggest the detailed treatment of the altar, the windows of the chapel, the triforium and the clerestory.

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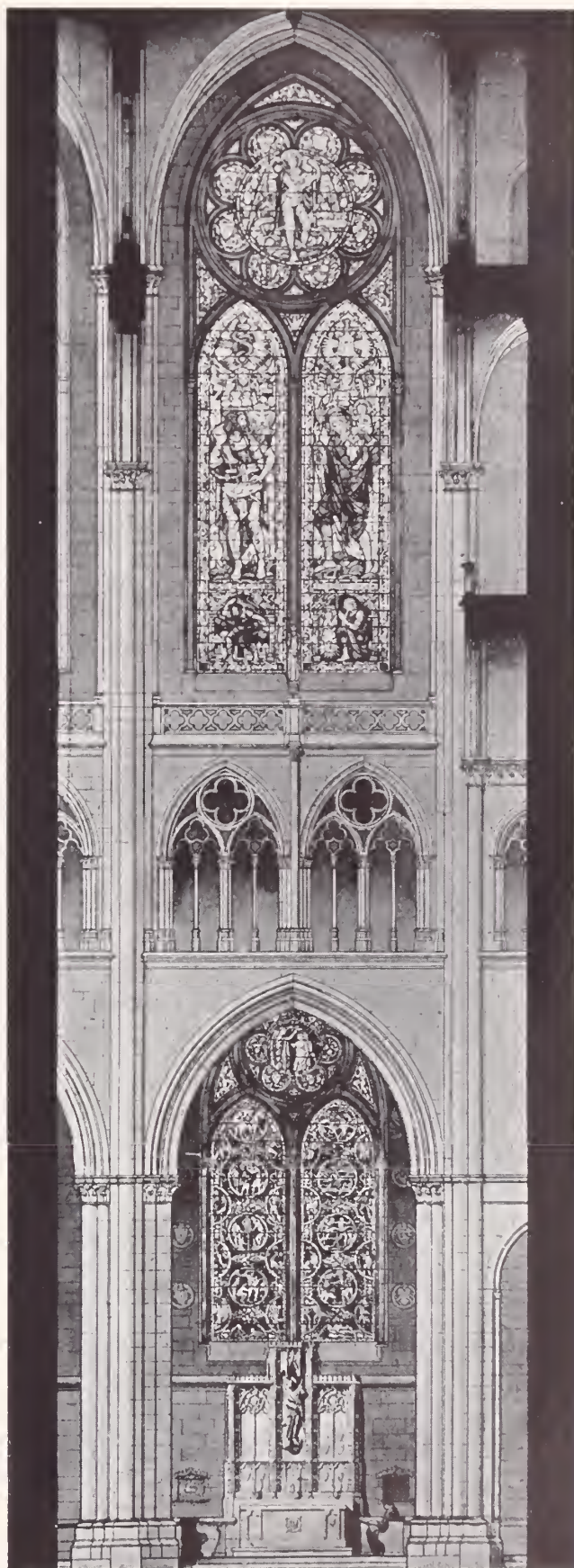
As indicated in the drawing on page 7, there are fourteen bays in the Nave, seven on either side. Five bays have been given by individuals or families, as memorials. Nine others are being built by community groups following the precedent of the trade guilds in the building of the old cathedrals. Two of these groups have reached their objective of \$150,000, and thus one-half of the bays are now fully provided for.

The division representing Historical and Patriotic Societies was the first to complete its fund through the generous gift of \$40,000 from its Vice-Chairman, Mr. Ormond G. Smith. One hundred and eleven societies contributed to the fund, and eight foreign governments made gifts to the Cathedral through the Chairman, General Charles H. Sherrill. The Bay of Historical and Patriotic Societies was officially assigned with an impressive service on December 11, 1927.

The fund for the Sports Bay, which had reached \$91,000, was next completed through an underwriting pledge of \$59,000 from an anonymous donor obtained by General Sherrill, who is also Vice-Chairman of the Sports Division. Mr. Julian S. Myrick is Chairman of this group. The underwriting covers quotas allocated to various sports which have not been formally pledged. The Sports Bay is to be officially assigned on January 29, 1928.

The fund for the Military and Naval Bay is more than two-thirds completed. The Education Bay and the Press Bay are more than one-third provided for. The funds for the Fine Arts Bay, the Bay of the Legal Profession, the Bay of the State of New Jersey and the Bay of the Medical Profession are near the one-third mark.

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The Sanctuary and Apse as they now appear. It is planned to remodel the Apse and Choir, above the level of the capitals of the columns, bringing them into conformity with the present design of the Cathedral.



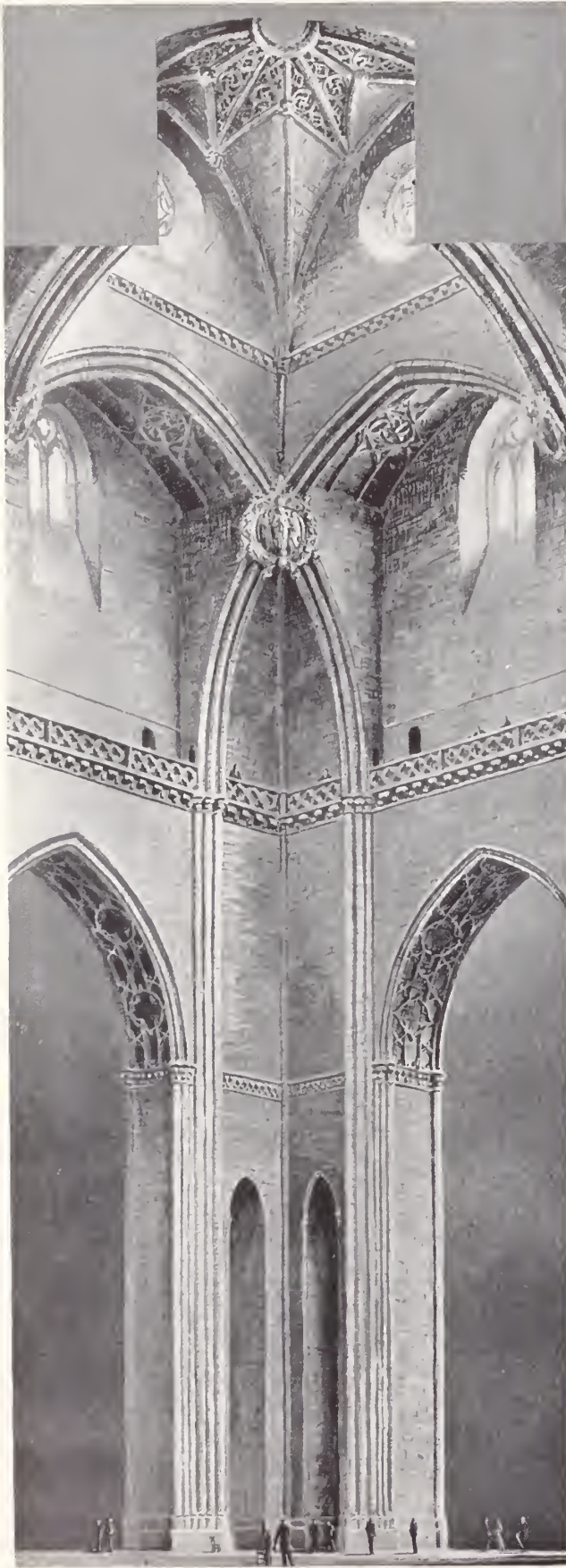
© Antoinette B. Hervey

The Baptistry, one of the most beautiful in the world. The font is not yet in place but is soon to be completed.



## ST. JOHN'S TOWER

(Reprinted from *The Outlook*)



SEVEN centuries ago, in a gradual transition, Gothic architecture developed out of the Romanesque. It reared cathedrals to tall, slender proportions, with no massive walls to support by their mere bulk the weight of the upper reaches of stone. It substituted the expedient of balancing the "thrust" of arches bearing stone vaulting against the thrust of other arches and against the weight and thrust of buttresses, and of leading the weight to the ground through piers at points of concentration.

Through the periods of Gothic building during these seven centuries the distinguishing principle of construction has remained the same, but architects have repeatedly sought new ways of applying it. Yet so masterful was the work of the artisan-architects of the great period when most of the French cathedrals were built that the architects of the revival of the Gothic have been able to do little more than to recombine mediaeval Gothic elements into new, and often supremely beautiful, buildings. Now Dr. Ralph Adams Cram, of Boston, the most devoted modern disciple of the thirteenth century, the architect of the Cathedral of St. John the Divine, which stands on an eminence in New York, has made a totally new application of the Gothic principle.

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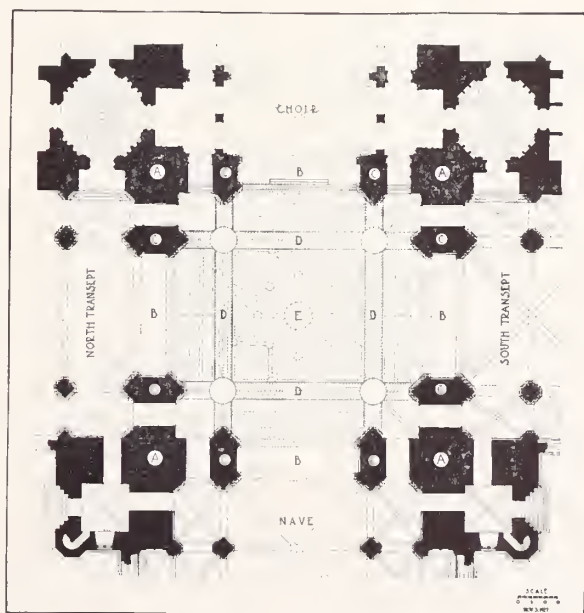
This drawing of the interior of the Crossing shows the intersection of two of the secondary arches by means of which the Central Tower, 60 feet square, is hung over the Crossing, 120 feet square. The design for this tower solves what had appeared to be an insuperable problem, and is a new development in the history of Gothic architecture.

He has made plans for the raising of a great tower over the crossing of the nave and transepts of the Cathedral with no supporting piers directly under it, but with the weight carried to outer piers by secondary arches springing from above the great main arches. By thus applying Gothic structural principles a sixty-foot square tower, perfectly proportioned to the exterior of the Cathedral, will be supported above a void one hundred and twenty feet square . . .

An obstacle to the satisfactory completion of the Cathedral has been the difficulty of covering the very large crossing. A square tower rising directly from the main piers in accordance with the usual Gothic treatment would have been one hundred and twenty feet square—disproportionately large in comparison with the rest of the building. A dome was out of the question, as not a Gothic element. The solution previous to Dr. Cram's recently accepted plan was a twelve-sided spire narrowing down from the size of the crossing;

but that pleased neither Dr. Cram nor the Trustees of the Cathedral.

The diagram on this page indicates the plan for hanging a sixty-foot tower over a crossing twice as large. The letters A designate the great main piers of the crossing. B shows the main arches springing from the main piers and defining the one hundred foot interior square of the crossing. C indicates the secondary piers in line with the main arcades of the nave, the choir and the transepts. D shows the intersecting arches, continuing the lines of the main arcades, resulting in a square of sixty feet upon which the tower will be supported. The white circles in the diagram represent the bosses at the intersections of the arches, not any sort of supporting columns. Above the vaulting of this square the tower will rise, with its weight converted into thrust by the arches it will rest on, and with the weight and thrust received by the secondary piers and by the arcades in each direction.



The dotted lines represent arches.





Mrs. Edmund L. Baylies, Chairman of the Women's Division, gives the signal for work to begin on the North Transept, December 5, 1927.

## THE WOMEN'S TRANSEPT

GROUND was broken for the Women's Transept on December 5, 1927. The work of construction on the Cathedral now covers the entire ground plan with the exception of the Chapter House and the South Transept. The Women's Transept will be similar to the Nave in general design but simpler in that but one line of piers will form the entrance to the six bays whose clerestory windows will continue the series which lines the Nave and which will eventually encircle the Cathedral.

This undertaking by women is without precedent in Christian history. Women have had a part in the building of every cathedral, frequently a notable part, but never before have the women of the Church and of the

community undertaken, as women, to build a major portion of a great world cathedral. Within the walls of their Transept will be many memorials, including the beautiful rose window which is to be given in memory of Mrs. Hamilton R. Fairfax, the first Chairman of the Women's Division.

The objective of the Division is \$1,000,000 which is now three-quarters subscribed. After Mrs. Fairfax, Mrs. Vincent Astor carried the work still further forward. The present Chairman is Mrs. Edmund L. Baylies, under whose leadership the members of the Division are actively engaged in the work of completing the fund so that construction of the Transept may continue without interruption.





The façade of the North Transept to be erected by the women of New York.

# CATHEDRAL OF ST. JOHN THE DIVINE

## DIMENSIONS

<i>Length</i>	<i>Width</i>	<i>Height</i>
West Front . . . . . 50 ft.	West Front . . . . . 207 ft.	Western Towers . . . . . 272 ft.
Nave . . . . . 225 "	Nave . . . . . 132 "	Ridge of Nave Roof . . 175 "
Crossing . . . . . 100 "	Transepts . . . . . 315 "	Nave Vaults . . . . . 124 "
Choir . . . . . 170 "	Central Aisle . . . . . 56 "	Choir Vaults . . . . . 124 "
St. Saviour's	Side Aisles (each) . . . 34 "	Lantern Vaults . . . . . 234 "
Chapel . . . . . 56 "	Crossing . . . . . 100 "	Central Tower . . . . . 400 "
—	Choir . . . . . 56 "	
Total Length . . . . . 601 "	Ambulatory . . . . . 20 "	Area . . . . . 109,082 sq. ft.

## COMPARATIVE DIMENSIONS OF GREAT CATHEDRALS

Cathedral	Area, Sq. Ft.	Height of Towers, Spires or Domes, Feet	Height Interior, Feet	Length Exterior, Feet	Width Central Aisle, Feet
St. Peter's, Rome . . . . .	227,069	448	150	718	100
Seville, Spain . . . . .	128,570	400	150	430	60
St. John the Divine, New York . . .	109,082	400	124	601	56
Duomo, Milan . . . . .	107,000	355	153	500	60
*Liverpool, England . . . . .	101,000	308	116	619	52
Cologne, Germany . . . . .	91,464	512	145	511	41
Amiens, France . . . . .	71,208	361	140	521	40
Washington, D. C. . . . .	70,000	275	95	525	41
St. Sophia, Constantinople . . . . .	70,000	185	184	350	100
Chartres, France . . . . .	68,260	378	122	507	50
Notre Dame, Paris . . . . .	64,108	204	110	390	45
York, England . . . . .	63,800	198	99	486	51
St. Paul's, London . . . . .	59,700	363	89	460	40
St. Patrick's, New York . . . . .	57,768	339	112	332	48
Winchester, England . . . . .	53,480	...	78	556	35
Rheims, France . . . . .	48,985	270	124	483	40
Westminster Abbey, London . . . .	46,000	225	101	511	35

\*The sixth edition of the official handbook does not give the area of the Liverpool Cathedral, which was given by the London *Times* at the time of the consecration as 101,000 square feet.





